

Checklist 1

LABORATORY REPORT GOAL: DATA VERIFICATION

Perform data verification on all samples collected to characterize the site, including quarterly groundwater monitoring samples and soil investigation samples. Data verification will be performed by a chemist or other professional with knowledge or experience generating analytical laboratory data. The professional should be familiar with the QC requirements specified for the analytical methods being reviewed. Data verification precedes data validation and is a systematic process for evaluating whether data has been generated with acceptable quality control, as defined in the Project QAPP.

At a minimum, the items listed below must be evaluated as well as completeness of supporting documentation. This is a cursory review of the laboratory's quality control and may suggest that a more thorough validation is needed.

Completed	Review Item
	1. Case Narrative Have any anomalies, deficiencies, and QC problems been identified in the case narrative? What corrective action, if any, was taken?
	2. Chain-of-Custody Documentation Are the original Chain-of-Custody forms with ID numbers and laboratory receipt signatures present?
	Are there copies of internal tracking documents, as applicable?
	3. Sample Analysis Results Are sample analysis results included for environmental samples, with quantitation limits (include dilutions and reanalyses)?
	4. QC Summary Is the following information included? Initial and continuing calibrations
	Method blanks, continuing calibration blanks, and preparation blanks
	Surrogate percent recoveries
	Internal standard percent recoveries

Completed	Review Item
	Matrix spike percent recoveries
	Laboratory duplicate relative percent differences
	Laboratory QC check sample, laboratory control sample recoveries
	Field duplicates, if identified, reproducibility will be evaluated
	Acceptance criteria, if not already established by the method/DQO
	Definitions for any laboratory data qualifiers used
	Method of standard additions (INORGANIC)
	ICP serial dilution (INORGANIC)
	5. Specifically review the following: Was a check for timeliness and errors conducted, including requested deliverables, preservation, holding times, and Chain-of-Custody?
	Was a duplicate sample/matrix spike/matrix spike duplicate/postdigest spike reviewed against precision and accuracy criteria specified by the method or by project DQOs?
	Were compound quantitation and reported detection limits reviewed, checking reporting limits against contract required limits, verifying dry weights, calculations, and dilutions?
	6. Does the Verification Report include the following information?: Case narrative including, but not limited to, an overall summary of data acceptability and comparison to DQOs and DQIs (PARCC), a list of recommended changes, a summary of all laboratory contacts, in which communications with the laboratory, if any, would be identified, and any other problems associated with the actual analysis which might impact the sample integrity or data quality
	Marking of recommended changes directly on copies of the laboratory reports for the client's ease in performing data entry

Completed	Review Item
	Tabulated summary of all data results supplied electronically by email or on 3.5-inch floppy disks in a commonly used software format